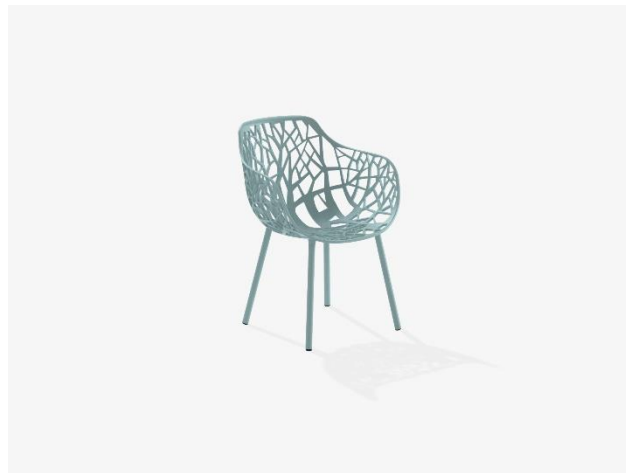

Environmental product declaration

FOREST ARMCHAIR – FAST SPA



Programme: The International EPD® System
Programme Operator: EPD International AB

UN CPC 3811
Seats

PCR 2009:02 Seats. Version 3
Scope of geographical application: Global

Geographical scope: Global
Date of approval: 28-12-2022
Registration no.: S-P-02379
Date of registration: 01-02-2023
Valid until: 08-11-2025
In accordance with ISO 14025

For further information about the EPD programme, visit the website: www.environdec.com

1 INTRODUCTION

Type III Environmental Product Declarations contain transparent and comparable information about the life-cycle environmental impact of products. Their goal is to produce reliable information expressed on a common basis which make it possible to compare the environmental performance levels of products having the same function. In this view of product sustainability, Type III Environmental Product Declarations are developed in conformity with the requirements and provisions set out in the voluntary standard UNIEN ISO 14025:2010 and to ensure the LCA studies are conducted consistently for all products which fall within the same category, specific rules and methods need to be observed. These rules are indicated by the PCR – Product Category Rules – which formulate instructions about the performance of a life cycle analysis for a specific product category, ensuring harmony and comparability of results.

2 INFORMATION ABOUT THE COMPANY AND PRODUCT

2.1 THE COMPANY¹



Figure 1- Explanatory picture

Fast was born in Valle Sabbia (Figure 1) in 1995 when the Levrangi family identified aluminium as the material of choice: light, versatile, ductile and sustainable because it can be recycled indefinitely. The company chooses to develop 100% outdoor products designed to be durable over time, resistant to atmospheric agents and completely waterproof. Thanks to the collaboration with Robby and Francesca Cantarutti, the Forest collection, still the company's bestseller, made its debut in 2007. Instead, it is the intuition of Studio Lievore Altherr in Barcelona that leads to experience, ten years later, a new sensuality of aesthetic lines and above all new,

sophisticated materials. The focus is also on customization: the skills in aluminium processing, combined with rigorous internal production and authentic Made in Italy, allow for a wide range of customizations in terms of sizes, colours and finishes. Fast's Outdoor Lifestyle is expressed in all its forms: not only the garden, the patio facing the sea, the large park, but also the squares, the city streets, the terraces of megacities surrounded by skyscrapers. It is a nature that we are committed to protecting, in a concrete approach to sustainability: this is why we involve the entire supply chain in continuous research, aimed at increasing the longevity of products and reducing their impact throughout the life cycle.

2.2 THE PRODUCT

¹ Owner of EPD: FAST SPA
Registered office: Via Gargnà 8 25078 Vestone (BS) Italy
Phone and E-Mail address. +39 0365 820522 | fastinfo@fastspa.com



The Forest armchair is made of extruded and die cast aluminium and is devised for outdoor use and for sociable occasions: drinks, an al fresco brunch, an informal dinner. None of the substances contained in the current version of the European regulation “Candidate List” 1907/2006/EC (REACH Registration, Evaluation, Authorisation and Restriction of Chemicals) is present in a concentration above 0.1% in weight in the product sold. Moreover, it is hereby declared that the product is not subject to classification or labelling in accordance with directive 67/548/EC and EC

Regulation no.1272/2008 (CLP) since it is considered an article and therefore falls outside their scope of application.

Table 1

MATERIAL	kg	
Aluminium	5,59E+00	Materials
Steel	8,30E-02	
Rubber	1,40E-02	
Paint	4,00E-01	
Cardboard	8,10E-01	Packaging
Wood	5,80E-01	
PE	3,67E-01	

3 LCA INFORMATION

3.1 DECLARED UNIT

The declared unit is 1 (one) chair for its entire life cycle.

3.2 REFERENCE SERVICE LIFE

The estimated service life is at least 15 years.

3.3 TIME BOUNDARIES

The time limits include the period from January 2021 to December 2021, a time span considered as representative of the company's activities. These were chosen given the most complete availability of information relating to the analysis.

3.4 DESCRIPTION OF SYSTEM BOUNDARIES

In accordance with the PCR, the environmental impact assessment follows the life cycle phases: Upstream, Core and Downstream.

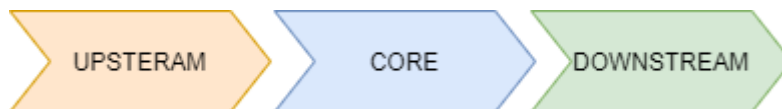


Figure 2

3.5 SYSTEM DIAGRAM AND PRODUCTION PROCESSES

For each phase, the environmental performance indicators summed up in Figure 3 were investigated. Primary data catalogued by the manufacturer was favoured in the choice of data to use for the study.



Figure 3

These data make up the primary source of information for the inventory analysis. They can be grouped together according to environmental performance indicators, which will subsequently refer to the environmental performance results. These indicators were used to process the software model and the inventory analysis therefore developed according to macro consumption referring to the declared unit which characterises the study.

Below is a block diagram (Figure 4) that defines the stages making up the production process of the products analysed.

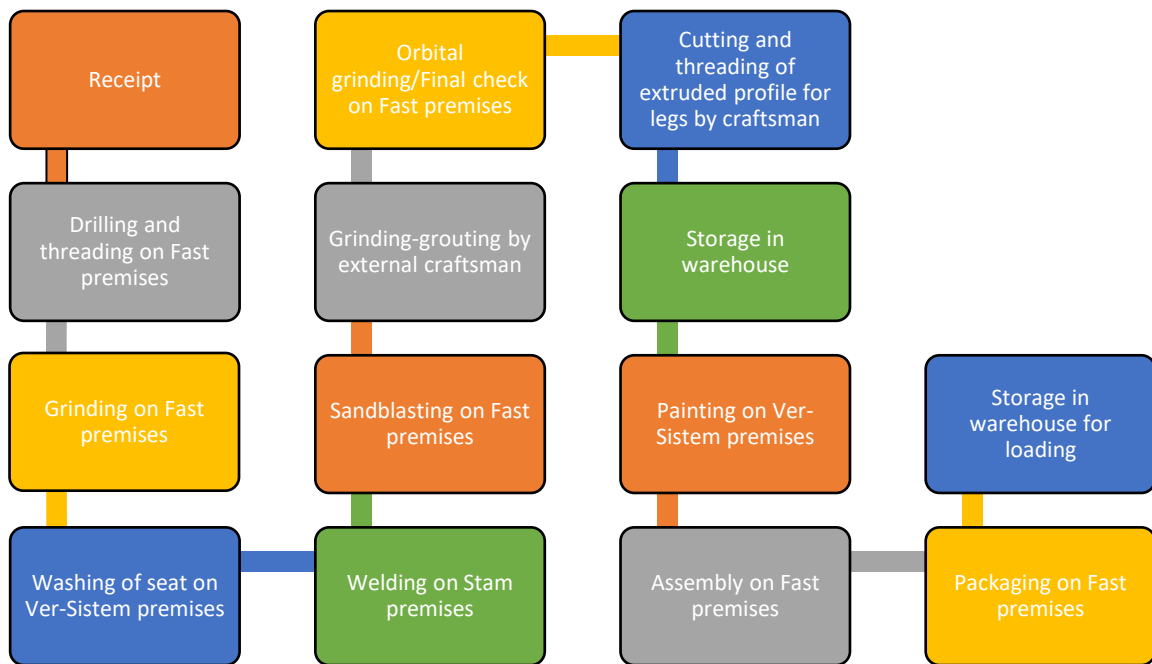


Figure 4

4 ENVIRONMENTAL PERFORMANCE

4.1 POTENTIAL ENVIRONMENTAL IMPACT

Below are the results of the ecoprofile obtained from the life cycle analysis of the products concerned by the environmental declaration, along the phases of their life cycle. The changes in the results found in this document compared to the previous EPD declaration concern: the updating of the Ecoinvent database and the updating of inventory data.

Table 2: Ecoprofile assessment with reference to the declared unit

FOREST ARMCHAIR		INFORMATION MODULES			
Category of impact	Unit of measurement	UPSTREAM	CORE	DOWNSTREAM ²	TOTAL
Acidification	kg SO ₂ eq	1,92E-01	2,37E-02	6,96E-03	2,22E-01
Eutrophication	kg PO ₄ ⁻⁻⁻ eq	5,43E-02	5,65E-03	6,05E-03	6,60E-02
Global warming	kg CO ₂ eq	3,44E+01	8,63E+00	2,18E+00	4,52E+01
Photochemical oxidation	kg NMVOC	1,12E-01	1,66E-02	7,45E-03	1,36E-01
Abiotic depletion, elements	kg Sb eq	3,21E-04	1,37E-05	1,66E-06	3,37E-04
Abiotic depletion, fossil fuels	MJ	4,86E+02	1,24E+02	1,13E+01	6,22E+02
Water use	m ³	6,46E+00	1,52E+00	7,93E-02	8,06E+00
Ozone layer depletion (ODP)	kg CFC-11 eq	3,46E-06	1,16E-06	1,33E-07	4,76E-06
Human toxicity, cancer	cases	1,25E-05	2,14E-07	1,29E-07	1,28E-05
Human toxicity, non-cancer	cases	9,36E-06	5,97E-07	9,18E-07	1,09E-05
Freshwater ecotoxicity	PAF.m ³ .day	3,39E+05	9,12E+03	4,21E+04	3,90E+05
Land use	species.yr	3,18E-08	1,59E-09	4,68E-10	3,39E-08

1= The GWP impact category indicator include biogenic carbon and it is normally referred as "GWP-TOT" or "GWP-total. 2= In the study, we hypothesised that all the aluminium is recovered. For the remainder of the materials, indication was taken from the last ISPRA waste report

4.2 USE OF RESOURCES AND WASTE PRODUCTION

For each product concerned by the declaration and with reference to the declared unit, below are the parameters describing the use of resources and the production of waste deriving directly from the LCI.

Table 3

PARAMETERS		UNIT	UP	CORE	DOWN	TOTAL
Primary energy resources - Renewable	Used as an energy carrier	MJ	2,42E+01	5,79E+00	7,07E+01	1,01E+02
	Used as raw materials	MJ	6,78E+01	2,83E+00	-7,06E+01	0,00E+00
	TOTAL	MJ	9,19E+01	8,62E+00	1,48E-01	1,01E+02
Primary energy resources – Non Renewable	Used as an energy carrier	MJ	6,28E+02	5,16E+02	1,71E+02	1,32E+03
	Used as raw materials	MJ	3,51E+01	5,93E+00	-4,11E+01	0,00E+00
	TOTAL	MJ	6,63E+02	5,21E+02	1,30E+02	1,32E+03
Secondary material		kg	1,38E-04	0,00E+00	0,00E+00	1,38E-04
Renewable secondary fuels		MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non renewable secondary fuels		MJ	1,10E-01	0,00E+00	0,00E+00	1,10E-01
Net use of fresh water ²		m ³	2,08E-01	3,78E-02	2,57E-03	2,49E-01

Table 4

PARAMETERS	UNIT	UP	CORE	DOWN	TOTAL
Hazardous waste disposed of	kg	3,56E-02	3,54E-02	1,86E-04	7,11E-02
Non hazardous waste disposed of	kg	8,27E+00	6,08E+00	6,35E-01	1,50E+01
Radioactive waste disposed of	kg	1,21E-03	9,29E-04	2,02E-04	2,34E-03

Table 5

PARAMETERS	UNIT	UP	CORE	DOWN	TOTAL
Components for the reuse	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Recycling material	Kg	0,00E+00	3,01E-01	5,59E+00	5,89E+00
Materials for the recovery of energy	Kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

² Direct quantity of water used by the core processes = 4,22E-02

5 REFERENCES

PCR 2009:02 Seats. Version 3

UNI EN ISO 14025:2010 – Environmental labels and declarations - Type III environmental declarations - Principles and procedures.

UNI EN ISO 14040:2006 – Environmental management - Life cycle assessment - Principles and framework.

UNI EN ISO 14044:2018 – Environmental management - Life cycle assessment - Requirements and guidelines.

GENERAL PROGRAMME INSTRUCTIONS FOR THE INTERNATIONAL EPD® SYSTEM VERSION 3.01 (2019-09-18)

Report LCA_FAST_V4.2

INFORMATION ABOUT THE PROGRAMME

Programme:	<p>The International EPD® System</p> <p>EPD International AB Box 210 60 SE-100 31 Stockholm Sweden</p> <p>www.environdec.com info@environdec.com</p>
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Product category rules (PCR): <i>PCR 2009:02 Seats. Version 3</i>
EPD REGISTRATION NUMBER: S-P-02379
The review of the PCR was conducted by: The International EPD® System technical committee. Complete list of TC members available at: www.environdec.com/TC
Independent third-party verification of the declaration and data, according to ISO 14025
<input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification
Third party verifier: < DNV Business Assurance Italy S.r.l.>
Procedure for follow-up of data during EPD validity involves third party verifier:
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

The EPD owner has sole ownership, responsibility and liability for the EPD. The EPDs in the same category of products but from different programmes may not be comparable. The EPDs of construction products may not be comparable unless they conform to EN 15804.

Owner of EPD	FAST SPA		https://www.fastspa.com/it Tel +39 0365 820522
Technical support	<p>Document developed by</p> <p>QUALITYNET SRL</p> <p>With the participation of</p> <p>ECAMRICERT SRL</p>	  	https://www.quality-net.it/ Tel +39 049 9003612 https://ecamricert.com/ Tel +39 0445 605838